5

10

Abstract

A portable authentication device and method of authenticating products or packaging by analyzing key ingredients on products or on product packaging is disclosed. Light-sensitive compounds can be used to identify the product or product packaging. The product or product package may include visible or invisible ink containing a particular light-sensitive compound. The ink may be printed in one or more locations on the product or product packaging to produce an authentication mark, such as a bar code. The device includes an assembly for providing a source of light to irradiate the ink containing the light-sensitive compound on the sample product or product package, an optical detector to detect certain spectral properties emitted or absorbed by the irradiated ink and a controller to determine the authenticity of the sample product or product package by comparing the emitted or absorbed properties to a standard.